

EXPRESS MAIL LABEL NO. EL814454975US

CLAIMS

1. A method for placing a recording head over a recording media within a rotatable storage medium, the method comprising the steps of:

5 maintaining a plurality of recording heads within a rotatable storage medium, wherein each recording head within the plurality of recording heads may be individually activated and wherein each of the recording heads is parked when not activated;

determining a required transducer to access a requested data set, wherein

10 the requested data set is stored within the disk drive and wherein the required transducer is a transducer which may access the requested data set; and

activating only the required transducer to access the requested data set.

2. The method of claim 1, wherein a one or more of the recording heads is

15 parked by placement of each of the one or more recording heads within a load/unload ramp.

3. The method of claim 1, wherein a one or more of the recording heads is parked by operating the one or more of the recording transducer heads in a power

20 savings mode.

4. The method of claim 1, further comprising the steps of:

determining a subset of the plurality of recording heads to remain active; and

activating the subset of the plurality of recording heads.

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5. The method of claim 2, wherein the step of determining a subset comprises determining a subset of the plurality of recording heads to remain active in order to improve data access performance.

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6. The method of claim 1, further comprising the steps of:
 - determining a damaged recording surface within the rotatable storage medium; and
 - 5 ceasing further use of a recording head that is associated with the damaged recording surface.
7. The method of claim 4, further comprising the step of copying data on the damaged recording surface to another recording surface.

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8. A rotatable storage medium, comprising:

a plurality of recording heads within the disk drive, wherein each recording head within the plurality of recording heads may be individually activated and wherein each of the recording heads is parked when not activated; and

5 a disk drive controller for determining a required transducer to access a requested data set, wherein the requested data set is stored within the disk drive and wherein the required transducer is a transducer which may access the requested data set.

10 9. The rotatable storage medium of claim 8, wherein a one or more of the recording heads is parked by placement of each of the one or more recording heads within a load/unload ramp.

15 10. The rotatable storage medium of claim 8, wherein a one or more of the recording heads is parked by operating the one or more of the recording transducer heads in a power savings mode.

20 11. The rotatable storage medium of claim 8, wherein the disk drive controller further determines a subset of the plurality of recording heads to remain active and activates the subset of the plurality of recording heads.

12. The rotatable storage medium of claim 11, wherein the disk drive controller further determines a subset of the plurality of recording heads to remain active in order to improve data access performance.

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13. The rotatable storage medium of claim 11, wherein the disk drive controller further determines a damaged recording surface within the disk drive and ceases further use of a recording head that is associated with the damaged recording surface.

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14. The rotatable storage medium of claim 13, wherein the disk drive controller is further configured to copy data on the damaged recording surface to another recording surface.

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15. A computer readable medium including computer instructions for a disk drive controller, the computer instructions comprising instructions for:
controlling a plurality of recording heads within a disk drive, wherein each recording head within the plurality of recording heads may be individually activated and
5 wherein each recording head is parked when not activated;
determining a required transducer to access a requested data set, wherein the requested data set is stored within the disk drive and wherein the required transducer is a transducer which may access the requested data set; and
activating only the required transducer to access the requested data set.

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16. The computer readable medium of claim 15, wherein a one or more of the recording heads is parked by placement of each of the one or more recording heads within a load/unload ramp.
- 15 17. The computer readable medium of claim 15, wherein a one or more of the recording heads is parked by operating the one or more of the recording transducer heads in a power savings mode.
18. The computer readable medium of claim 15, further including computer
20 instructions for:
determining a subset of the plurality of recording heads to remain active; and
activating the subset of the plurality of recording heads.
19. The computer readable medium of claim 18, wherein the instructions for
25 determining a subset comprises instructions for determining a subset of the plurality of recording heads to remain active in order to improve data access performance.

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20. The computer readable medium of claim 15, further including computer instructions for:
determining a damaged recording surface within the disk drive; and
 - 5 ceasing further use of a recording head that is associated with the damaged recording surface.
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21. The computer readable medium of claim 20, further comprising instruction for copying data on the damaged recording surface to another recording surface.

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